

males. In trap number 3, however, in addition to the elytra of the *P. dubitalis dubitalis* female, the elytra and metathoracic wings of a *P. simi* adult male were found. In this case, then, the male probably was attracted by the female prior to the entry of the predator which then devoured both beetles.

In view of the observations reported here, it may be noted that if the attractive mechanism drawing *P. minor* males to *P. minor* females is the production of a female sex pheromone, as speculated by Zwick and Peifer (1965), such a pheromone probably is produced also by *P. dubitalis dubitalis* females. Moreover, since in at least one case a *P. simi* male was attracted to a *P. dubitalis* female, the attractant may not be species-specific.—DAVID G. FELLIN,² *Department of Entomology, Oregon State University, Corvallis.*

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***Tyrophagus putrescentiae* and *Megaselia scalaris* Infesting Laboratory Cultures of Sciomyzid Flies¹** (ACARI: ACARIDAE; DIPTERA: PHORIDAE AND SCIOMYZIDAE).—The rearings of Sciomyzidae with terrestrial larvae at the limnological laboratory of the Department of Entomology, Cornell University, Ithaca, N. Y. were infested by the acarid mite *Tyrophagus putrescentiae* (Schrank) and by the phorid fly *Megaselia (Megaselia) scalaris* (Loew) on several occasions.

The sciomyzid flies were kept in breeding jars constructed by placing a bottomless jar about 7 cm high and 5 cm in diameter in a plastic Petri dish of slightly larger diameter, containing a layer of compressed, slightly moistened, peat moss. The jar was covered with nylon cloth fixed with two rubber bands. A narrow margin of the peat moss layer was thus exposed to organisms outside the breeding jar. The food for adult flies, i.e. a mixture of honey, brewer's yeast, and dried milk, and also both crushed and living aquatic snails were put into each breeding jar.

Tyrophagus putrescentiae probably penetrated into the breeding jars both through the nylon cloth and the exposed peat moss, but there is no positive evidence of either of these two modes of entry. The mites were feeding on dry snail tissue, on an organic layer covering snail shells (remnants of organic deposits, microorganisms living in and on these deposits, and perhaps also periostracum), on dry fly food, and particularly on sciomyzid eggs. Because of the latter habit, they are not only a nuisance but serious pests in laboratory cultures.

The infestation of *Megaselia scalaris* was initiated by females penetrating into the jar through the cloth and laying eggs inside the jar, and very probably also by oviposition into that peat moss exposed outside which was soaked with fly food. The larvae were feeding both on dead snails (either previously killed by sciomyzid larvae or having died of drought) and fly food resting on, or mixed with, peat moss. No killing of snails by phorid larvae was positively ascertained. Occasionally, phorid larvae were observed to feed on sciomyzid adults that had died recently. The damage caused by Phoridae, if any, was only indirect. The phorid and sciomyzid larvae perhaps had to compete for food or space.

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The control of phorid flies was easily accomplished by using double nylon cloth to cover the jars, which kept ovipositing females out, and by consistent destruction of any phorid larva or puparium found when jars were checked. The mites, on the other hand, were very difficult to control. Whenever an infestation was found, it was necessary to transfer sciomyzid flies into a new breeding jar immediately, and to treat the whole old jar, including peat moss, with alcohol. Large glass containers with tight glass lids were used for this purpose. Whenever it was necessary to keep infested jars untouched for some time, they were placed on a separate table far from current rearings.

The help of Dr. D. E. Johnston (Columbus, Ohio), Mr. C. A. Lanciani (Ithaca, N. Y.), and Mr. W. H. Robinson (Ames, Iowa) in the identification of infesting species, and valuable suggestions of Dr. C. O. Berg (Ithaca, N. Y.) are appreciated.—JAN ZUSKA,² *Cornell University, Ithaca, New York.*

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The Rediscovery of *Manica parasitica* (Hymenoptera : Formicidae).—In 1932 Dr. W. S. Creighton collected a new species of *Manica* on the summit of Polly Dome in Yosemite National Park, California at an elevation of about 8,600 feet. He found 13 workers in a nest of *Manica bradleyi* W. M. Wheeler consequently he named them *Manica parasitica* Creighton (1934, *Psyche*, 41: 185). In the intervening 35 years other American myrmecologists have made pilgrimages to Yosemite, especially to Polly Dome, in vain efforts to collect more of this species. For several years, in the course of our study of the genus *Manica*, we have examined many nests of *M. bradleyi* in many localities always hoping that we would find *M. parasitica*. Finally on 7 September 1967 our efforts were meagerly rewarded (one worker), but not on Polly Dome, nor even in Yosemite.

Our specimen was taken from a typical nest of *M. bradleyi* in an opening in a coniferous forest in sandy loam on a rather steep slope. A cluster of ants under a small stone was bagged with soil without close examination. We had despaired so long of finding *M. parasitica* that the sample was aspirated, preserved in alcohol and pinned several days later before we realized that we had something unusual.

We returned to the site with Mr. Oscar Stark, Laboratory of Desert Biology, on 17 September. Further extensive excavation uncovered one more all-black worker. The total *M. bradleyi* population collected was 379 workers, 1 winged female, 53 males, 1 larva and 40 worker pupae.

We sent the first specimen to Dr. Creighton, who reported on it by letter: "I think that there is no doubt that you have rediscovered *Manica parasitica* and I congratulate you on the discovery. The specimen that you sent me is somewhat more heavily sculptured than any member of the type series but, as there was notable variation in the sculpture of the thirteen types, all that this means is that the type series did not show the full range of sculpture which marks the worker of *parasitica*."

The second worker of *M. parasitica*, which was very similar to the first, was kept in an observation nest with 91 workers and 22 males of *M. bradleyi*. It was quite able to feed itself. It was very easy to distinguish from the *M. bradleyi* workers by its quicker response to disturbances, by its faster gait and by the bouncing of the anterior end as it walked. We thought at first that this might